

# A REVISION OF THE SPECIES OF THE GENUS LOXOCERA, WITH A DESCRIPTION OF A NEW ALLIED GENUS AND A NEW SPECIES.

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Species based entirely on color, a character which further study proves to be very inconstant, are a source of considerable trouble to the student. After a great deal of collecting, and a study of some 75 specimens including Loew's types, it seems apparent that Say's *Loxocera cylindrica* represents an extremely variable species, which for convenience and to more fully emphasize this variability might be divided into four varieties according to the following table.

## Table of Species.

1. Wings hyaline with the tips and posterior cross veins distinctly clouded. . . . . *cylindrica* Say
  - a. Anterior margin of the thorax, a dorsal line, humeri, and lateral lines, black. . . . . var. *cylindrica* Say
  - b. Anterior margin very broad, covering at least one-third of the thorax, a dorsal line, short lateral lines and about one-third of the anterior of the pleura, black  

var. *pleuritica* Loew
  - c. Dorsal line, humeri, lateral margins and the upper half of the pleura, black. . . . . var. *pectoralis* Loew
  - d. Dorsal and lateral lines (sometimes obsolete) and a spot above the yellow humeri, black. . . . var. *obsoleta* var. nov.
 Wings brownish, without the apical clouding. . . . . 2
2. Anterior third of the thorax black, dorsal and lateral lines wanting; abdomen, except the sides of the first segment, black  

*collaris* Loew

 Anterior and lateral margins and a dorsal line on the thorax, black; abdomen except at the base red. . . *fumipennis* Coq.

## *Loxocera cylindrica* Say.

*L. cylindrica* Say, Jour. Acad. Nat. Sci., Phila., III 98, 1823.

Say's description is very clear: "Thorax with an undulated

band on the anterior margin, dorsal line and an obsolete line before the wing, black; wings a little dusky, particularly at tip." This represents practically the more characteristic or intermediate form merging into the darker *pleuritica* on the one hand and the lighter colored *obsoleta* on the other. Say's "var. a" I am calling *obsoleta*. It is the prevailing form of southern Pennsylvania and New Jersey and is the only form found by the writer in southern Virginia and North Carolina. The variety *pleuritica* is the prevailing form from New Jersey northward; it is often confused with *pectoralis*, a much rarer form, of which I have typical examples from only three localities, and in each case a female, as is the type. In its dorsal thoracic markings it approaches *obsoleta*, as the anterior marginal band is interrupted in both cases.

The following records show the northern and southern distribution of the species and its varieties:

*L. cylindrica* Say (typical).

Glen House and Alstead, N. H.; Dummerston, Vt.; Auburndale, Fall River and North Adams, Mass.; Philadelphia, Pa.; Algonquin, Ill. (Dr. Nason); Minnesota (Washburn); Kansas (Snow). Type, Pennsylvania. I have not seen the specimens from Minnesota and Kansas.

var. *pleuritica* Loew.

Machias, Me.; Mt. Washington, N. H.; Norwich, Vt.; Montreal, Can.; Ithaca, N. Y.; Agricultural College, Mich.; Auburndale and Woods Hole, Mass.; Delaware Water Gap, N. J.; Kansas (Snow). Types, Connecticut, New York.

var. *pectoralis* Loew.

White Mountains, N. H.; Mt. Ascutney, Vt.; Auburndale, Mass.; Edge Hill, Pa. Type, Washington, D. C. Two specimens (♂ ♀) from Great Falls and Chain Bridge, Va. (N. Banks) have the black of the pleura interrupted below the wings.

var. *obsoleta* var. nov.

Burlington, Vt.; Plymouth, Mass.; Branford, Conn.; Delaware Water Gap, and Clementon, N. J.; Philadelphia and Natrona, Pa.; Potomac Creek and Suffolk, Va., and Hertford County, N. C.

***Loxocera collaris* Loew.**

This is usually smaller than *L. fumipennis* Coq., and readily distinguished by characters given in the above table. Specimens from Washington and Oregon I cannot separate from those of the eastern states, thus giving it a wider distribution than any of the other species. Aside from the typical locality, District of Columbia, there are specimens in the collection of the Boston Society of Natural History from Liberty, Me. (J. A. Cushman); Medford, Mass. (G. W. Barber); Salem, Mass. (A. P. Morse). Also from Great Falls, Va., May 19 (N. Banks), in the Museum of Comparative Zoölogy.

***Loxocera fumipennis* Coq.**

Except for the uniform dark brown wings, the species resembles *L. cylindrica*. It is more clearly related to the European *L. elongata* than any of the other American species. Distribution, Kansas, Texas and Colorado.

***Loxocera quadrilinea* Walker.**

The identification of this species from the description is hopeless.

***Pseudopsila* new genus.**

This represents a group intermediate between the true *Loxocera* and *Psila*. The former has the third joint of the antenna at least five times as long as the second and exceeding the length of the arista. The typical species of the genus *Psila* (*P. fimentaria* L.) has an ovate rounded third antennal joint scarcely longer than the second. In *Pseudopsila* the third joint is subcylindrical and about three times as long as the second, the latter being relatively shorter than in the typical *Loxocera*. Arista almost double the length of the third joint. One pre-dorso-central, immediately in front of the suture (these are easily broken and are present on but few of the museum specimens), one post-dorso central just in front of the scutellum, two supra alar and a small presutural bristle. Type, *Loxocera fallax* Loew.

*Table of Species.*

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|--------------------------------------|--------------------|
| 1. Thorax entirely black.....        | <i>fallax</i> Loew |
| Thorax yellow marked with black..... | 2                  |

2. Dorsum without lateral margins of black . . . . . 3  
    Dorsum with lateral margins of black . . . . . 4
3. Humeri and upper half of the pleura black . . . *angustata* Cress.  
    Anterior margin, pleura, metanotum and a narrow dorsal line  
    black . . . . . *perpolita* sp. nov.
4. With broad lateral margins only, upper half of the pleura  
    black . . . . . *bivitatta* Loew  
    With a broad anterior and lateral margins, upper half of the  
    pleura black . . . . . *collaris* Loew

***Pseudopsila fallax* (Loew).**

*Loxocera fallax* Loew, Cent., IC, 89, 1869.

In a note Loew refers to this species as being intermediate between *Loxocera* and *Psila*. It is readily distinguished by having both the thorax and abdomen shiny black. It has the following distribution: Mt. Washington, 4,000 feet, Glen House and Intervale, N. H.; Auburndale, Cohasset and Fall River, Mass.; Kaaterskill and Axton, N. Y. Type locality, Canada.

***Pseudopsila perpolita* sp. nov.**

Head yellow, upper half of the occiput and vertical triangle black; third joint of the antennæ black about three times as long as the second; aristæ white. Thorax including the scutellum yellow, with short yellow hairs, anterior margin, a stripe occupying the greater portion of the pleura and the metanotum, shiny black. A very narrow blackish dorsal line is also present, which is usually obsolete behind the suture. One pre-dorso-central just in front of the suture, and one post-dorso-central in front of the scutellum, the alar bristles are wanting. Abdomen shiny black, with short yellow hairs, ovipositor yellow. Halteres white. Wings hyaline, veins light yellow, wings noticeably large for the size of the fly, anterior cross vein slightly nearer the base of the discal cell than in *P. fallax*, *i. e.*, less than one-third the length of the cell. Legs light yellow, tips of the tarsi brown. Length 4 mm.

Seven specimens, six females, Center Harbor, N. H., September 10, 1914 (C. W. Johnson), and one male, Liberty, Me., September 9, 1915 (Dr. J. A. Cushman). Holotype and three paratypes in the collection of the Boston Society of Natural History, two paratypes

in the Museum of Comparative Zoölogy and one in the author's collection.

This species resembles *Psila lateralis* Loew in general appearance, but the longer antennæ readily separate it from that species, while from *P. collaris* Loew, it is at once distinguished by the highly polished black markings and the absence of black on the sides of the dorsum.

***Pseudopsila angustata* (Cresson).**

*Psila angustata* Cresson, Proc. Acad. Nat. Sci., Phila., 1919, p. 193.

An interesting species resembling in color *Psila lateralis* Loew, but much larger. The pre-dorsal-centrals are not present in the two specimens before me, neither are they present in the two following species. In addition to the type locality, Ithaca, N. Y., it has been taken by Mr. A. P. Morse at Woodstock, Vt.

***Pseudopsila bivittata* (Loew).**

*Psila bivittata* Loew, Cent., VIII, 67, 1869.

The form of the antennæ places this also in this group. It is common and quite widely distributed from Quebec (Osten Sacken) and Maine to Philadelphia, Pa., and probably much farther South. Type from Connecticut.

***Pseudopsila collaris* (Loew).**

*Psila collaris* Loew, Cent., VIII, 68, 1869.

This may prove to be only a variety of the preceding. Distribution, White Mountains, N. H. to Virginia. Type also from Connecticut.

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PROCEEDINGS OF THE CAMBRIDGE  
ENTOMOLOGICAL CLUB.

The annual meeting of the Cambridge Entomological Club was held January 13 at the Bussey Institution, Forest Hills, Boston, and the following officers were elected for 1920:

*President*, C. A. Frost, Framingham.

*Vice-President*, W. L. W. Field, Milton.

*Secretary*, J. H. Emerton, Boston.

*Treasurer*, F. H. Walker, Salem.